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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,874	12/13/2004	Guang-Pei Chen	PC/4-32528A	1341

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NOVARTIS
CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
QAZI, SABIHA NAIM	

ART UNIT	PAPER NUMBER
1612	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,874	CHEN ET AL.	
	Examiner	Art Unit	
	Sabiha Qazi	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Office Action

Claims 1-14 are pending. **No** claim is allowed at this time. Amendments are entered.

Summary of this Office Action dated Saturday, June 21, 2008

1. 35 USC § 103(a) Rejections
2. Declaration and Response to Remarks
3. Conclusion
4. Communication

Claim Rejections - 35 USC § 103—1st Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over KATHAWALA et al. (US Patent 5,354,772) in view of EKWURIBE et al (US Patent 6,479,692). The references teach fluvastatin salts, which embrace Applicant's claimed invention. See the entire documents.

KATHAWALA et al teaches indole derivatives such as fluvastatin and its salts as inhibitors of HMG-CoA reductase and method of inhibiting cholesterol biosynthesis. See claims especially claim 19-30. See example 14 which is sodium salt of fluvastatin and see 6, 8, 9, 22 and 39. The reference teaches sodium and potassium salts of the compounds. . Sodium salt of the claimed compound is commonly known as Fluvastatin, Sodium is a known drug. Method of preparation is also taught by the prior art.

Instant claims differ from the reference in claiming a calcium salt wherein prior art teaches sodium salt.

EKWURIBE et al teaches that pharmaceutical acceptable salts are salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects. Examples include calcium salts. Pharmaceutically acceptable salts defined as salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects. Examples of such salts are (a) acid addition salts formed with inorganic acids, for example hydrochloric acid, hydrobromic acid, sulfuric acid, phosphoric acid, nitric acid and the like; and salts formed with organic acids such as, for example, acetic acid, oxalic acid, lactic acid, tartaric acid, succinic acid, maclic acid, ascorbic acid, benzoic acid, methanesulfonic acid, p-toluenesulfonic acid, naphthalenedisulfonic acid, polygalacturonic acid, and the like; (b) salts formed from elemental anions such as chlorine, bromine, and iodine, and (c) salts derived from bases, such as ammonium salts, alkali metal salts such as those of sodium and potassium, **alkaline earth metal salts such as those of calcium and magnesium.** See lines 15-30 in col. 11.

It would have been obvious to one skilled in the art at the time of invention to prepare additional beneficial calcium salts of fluvastatin which is a known active drug in the market (as fluvastatin Sodium) because EKWURIBE et al teaches calcium salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects. Since prior art teaches such compounds are useful for the treatment of hypercholesterolemia, atherosclerosis. The steps to prepare calcium salts by hydrolyzing the compound of formula IB to IC by alkali metal salts and then treating IC with a calcium compound to form calcium salts of 1A would have been obvious to one skilled in the art at the time invention was made.

See KSR Supreme Court of United States Decision (Decided April 30, 2007, KSR INTERNATIONAL CO. v. TELEFLEX INC. et al. No. 04-1350) where it states that "However, the issue is not whether a person skilled in the art had the motivation to combine the electronic control with an adjustable pedal assembly, but whether a person skilled in the art had the motivation to attach the electronic control to the support bracket of pedal assembly". In the present case preparation of calcium salts of known excellent drug fluvastatin Sodium available in the market would have been obvious to one skilled in the art at the time the invention was made.

In absence of any criticality and/or unexpected results presently claimed invention is considered obvious over the prior art of record. In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103—2nd Rejection

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Der SCHAAF et al. (WO 02/36563) and EKWURIBE et al (US Patent 6,479,692). The reference teaches various crystalline forms of fluvastatin sodium, A, B1, B2, C, D and E. The advantages of these crystalline forms that these can be better handled and are more stable at normal environmental humidity levels. Further these crystalline forms can be obtained from aqueous media without the risk of residual organic solvents. See the entire document especially page 1, lines 1-1-22 on page2, lines 1-6 on page 4, examples and claims. The X-Ray powder diffraction of each crystalline form has been disclosed.

Instant claims differ from the reference in claiming a calcium salt wherein prior art teaches sodium salt.

EKWURIBE et al teaches that pharmaceutical acceptable salts are salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects. Examples include calcium salts. Examples of such salts are (a) acid addition salts formed with inorganic acids, for example hydrochloric acid, hydrobromic acid, sulfuric acid, phosphoric acid, nitric acid and the like; and salts formed with organic acids such as, for example, acetic acid, oxalic acid, lactic acid, tartaric acid, succinic acid, maelic acid, ascorbic acid, benzoic acid, methanesulfonic acid, p-toluenesulfonic acid, naphthalenedisulfonic acid, polygalacturonic acid, and the like; (b) salts formed from elemental anions such as chlorine, bromine, and iodine, and (c) salts derived from bases, such as ammonium salts, alkali metal salts

such as those of sodium and potassium, **alkaline earth metal salts such as those of calcium and magnesium.** See lines 15-30 in col. 11.

It would have been obvious to one skilled in the art to prepare ant salt of fluvastin because first, EKWURIBE teaches salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects. Second, since the crystalline form of fluvastatin sodium is an excellent drug taught by van Der SCHAAF et al. (WO 02/36563) for the treatment various diseases, it seems obvious to prepare any salt such as sodium because the salts are expected to retain the biological activity. Third, one would be motivated to prepare any salt of fluvastatin such as calcium salts in any crystalline forms because fourth, SCHAAF teaches the advantages of the crystalline forms that they can be better handled and are more stable at normal environmental humidity levels. Fifth, these crystalline forms can be obtained from aqueous media without the risk of residual organic solvents.

In absence of any criticality and/or unexpected results presently claimed invention is considered obvious over the prior art of record.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Declaration and Response to Remarks

The declaration filed by Applicants on 3/15/08 has been considered by the Examiner. There is no data to explain the unexpected results. Applicant is requested to explain in detail the unexpected results. Examiner will withdraw the rejections when the declaration will explain non-obvious of the claimed subject matter.

Claims stand rejected under USC 103 over the combined teachings of KATAHAWALA et al[1] and EKWURIBE et al[2].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

[1] US Patent Number 5,354,772

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sabiha Qazi/

Primary Examiner, Art Unit 1612

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[2] US Patent Number 6,479,692